# Technical Bulletin

# Setting up Colibri tank gauging with the FMS board

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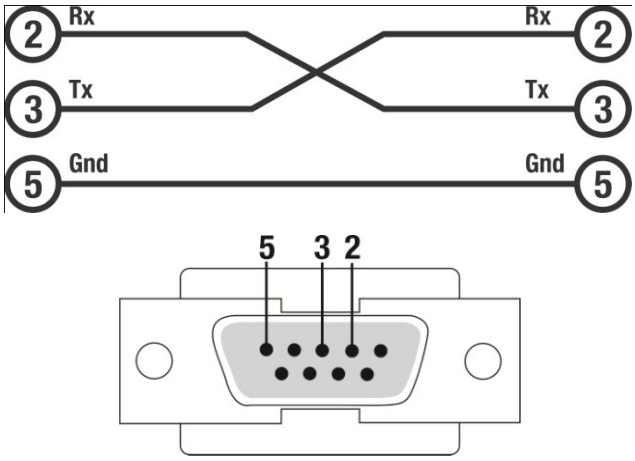
## Scope

The Compac FMS board is able to communicate to various types of automatic tank gauging units. This Bulletin explains how to setup the Compac FMS board to communicate to the Colibri automatic tank gauging unit

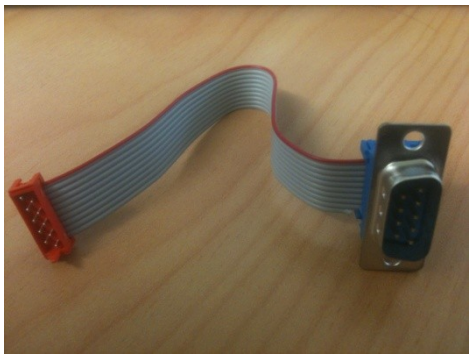
## Wiring

The connection between the Compac FMS board and the Colibri tank gauging is a cross over cable with two female ends.



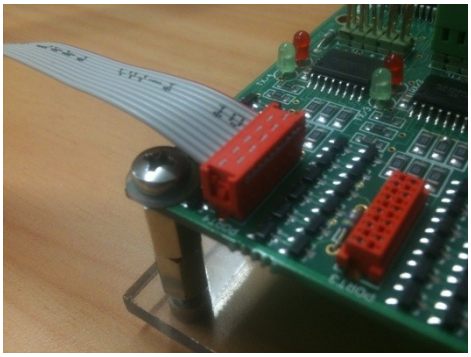

*Communication cable both ends are crossover and are female*

To connect the Communications cable to the FMS board there is small ribbon cable. This ribbon cable has a DB9 on one end and on the other end an orange plug.



The DB9 connector bolts on the back of the communicator or to the L bracket on the DCA and the OPT.

The orange plug end plugs into the orange sockets on the FMS board. There is a locating tab on the plug and holes in the FMS to get them in the right orientation.

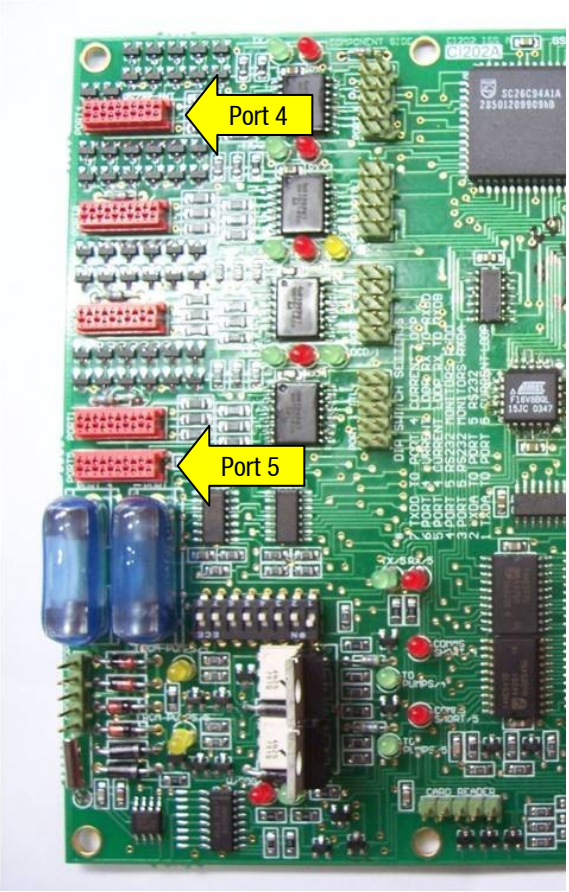


There are 2 positions the tank gauging can be plugged into.

The first and most common is RS232 port 4 (channel 2)

And second RS232 port 5 (channel 1).

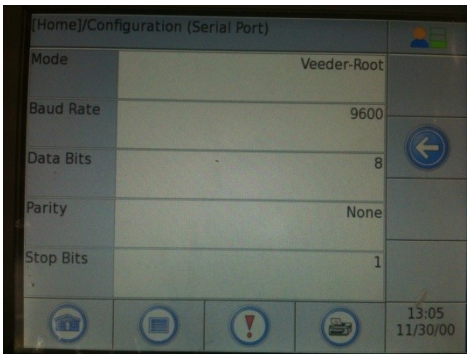
Note that if you are using port 5 as tank gauging you must set dip switch 2 on and dip switch 1 off



## Colibri Setup

The Colibri tank gauging unit should be setup with the following communication settings

- Veeder-Root (Coms mode)
- 9600
- 8 Bit
- No parity
- 1 stop bit



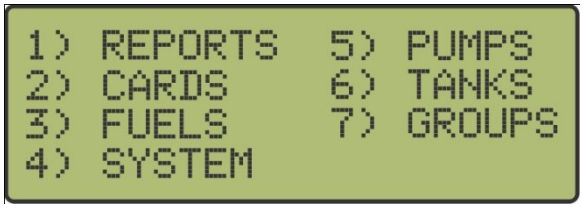

*Colibri communication settings*

## Compac FMS Setup

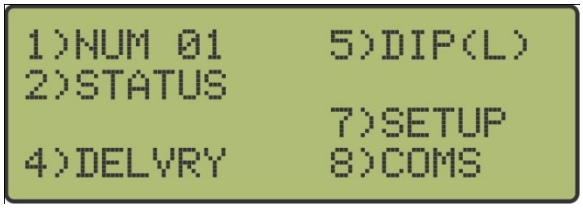
The FMS is setup to display the output of the Colibri, therefore no strapping tables or alarms are sent to the Colibri. However the capacities must be set in the FMS board.

1. First start by entering the FMS board setup menu. You may need to press “NO” and enter the pass code to enter the menu.


2. Press the number that is next to the Tanks menu. In this example the tanks menu is 6 but different software versions may have different numbers against each option.




3. Under the tanks menu you will find the following view. To see the missing options you must select the correct tank gauging type. To do this press 8 for coms



4. Set the tank gauging type by pressing 1. Pressing 1 will cycle through the tank types. Stop pressing 1 when you get to the type FRNK.

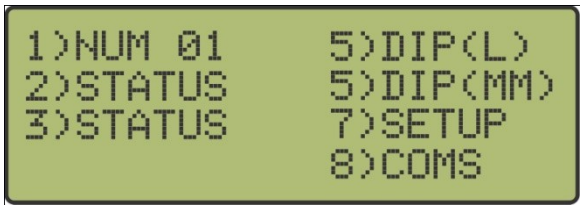
   The channel is the RS232 port the tank gauging is connected to

   For port 4 you must set the channel to 2

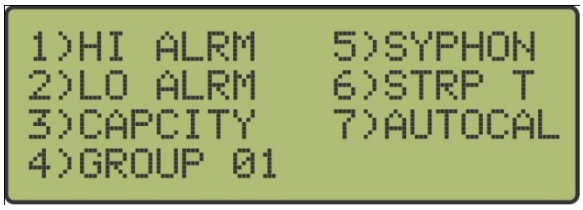
   For port 5 you must set the channel to 1

   The ID number should be set to be the same as the tank number

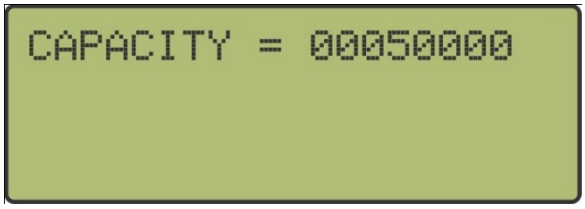

5. Press clear and this will take you to the main tanks menu. You will now see more options. Press the 7




6. Set the group number to the same as the pump group number using that tank.

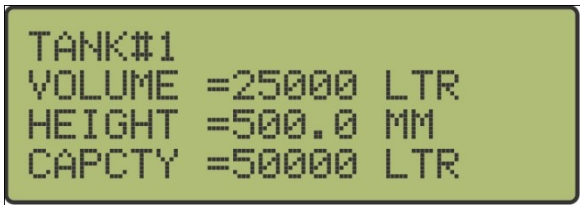



7. Enter the capacity




8. Press clear until you are back at the main menu. Check the status by pressing 2. You should be able to see the tank levels.

   **If you do not see any data you may have to repower both the FMS and the Colibri and re-check.**

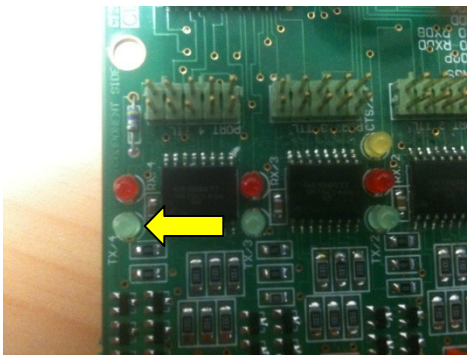


# Troubleshooting

If there is a problem and the tank gauging unit doesn't communicate with the FMS board you can check the following.

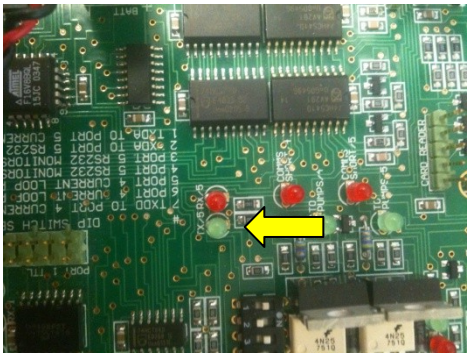
1. Check that the green Tx LED on the FMS board is flashing

   For Channel 2 port 4 (most common) the Tx/4 should be flashing



*FMS board showing Tx/4*

   For Channel 1 port 5 the Tx/5 should be flashing

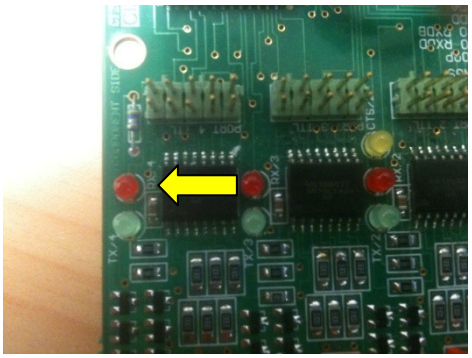


*FMS board showing Tx/5*

   If the green Tx LED is not flashing that means the settings in the FMS board are incorrect. Check the settings in the FMS board under the tanks menu. If using port 5 check that dip switch 2 is on and dip switch 1 is off.

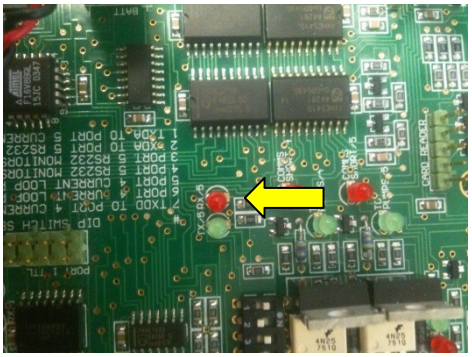
2. If the Green Tx LED is Flashing but the Red Rx LED is not flashing

   For Channel 2 port 4 (most common) the Rx/4 should be flashing



*FMS board showing Rx/4*

For Channel 1 port 5 the Rx/5 should be flashing

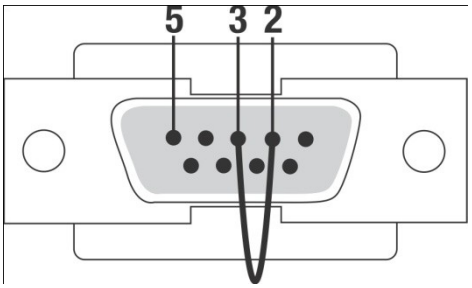


*FMS board showing Rx/5*

If the Red Rx LED is Not flashing that means that the tank gauging unit is not setup with the correct communication settings. Check the communication settings in the tank gauging unit.

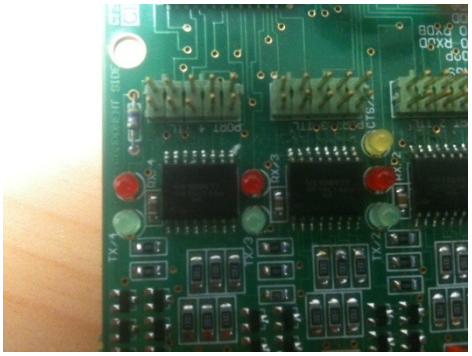
If the communication settings in the tank gauging unit are set correctly then it can be a cable fault. To test the cable do the following

3. To test the cable connect together pin 2 and 3 on the Colibri end of the communcations cable. This will form a loop back feeding the Tx of the FMS board back into the Rx of the FMS board.




*Jummper connecting pins 2 and 3*

When Pins 2 and 3 are shorted together both Tx and Rx LED's should flash in time. If the LED's don't flash that means there is a break in the cable.



*Tx/4 and Rx/4 LED's*

Helpdesk assistance
For any further queries regarding the above Service Advisory, contact the Compac Helpdesk on +64 9 579 1877 (Worldwide) or 1800 145 887 (Australia) helpdesk@compac.co.nz